

ABSTRACT

A method for adjustment of the relative angle of rotation between a camshaft and a crankshaft in an internal combustion engine through an electromechanical phase adjuster is provided. The invention provides a rapid and precise adjustment behavior. To that end, a deviation of the adjustment speed ($\Delta\Omega$) between a desired adjustment speed (Ω_{SOLL}) and an actual adjustment speed (Ω_{IST}) is calculated from at least one measurement parameter in a second control loop cascaded below the first control loop. An output parameter is calculated dependent on the deviation of the adjustment speed ($\Delta\Omega$) through an adjustment speed adjuster (26) cascaded below the angle of rotation adjuster (23), with the output parameter being used to adjust the angle of rotation (Φ) using an electromechanical actuator (14). The relative angle of rotation can be rapidly and precisely adjusted by adjusting the adjustment speed. A phase adjuster for controlling the relative angle of rotation is also provided.